

CIRCULAR SAW INSTRUCTION MANUAL

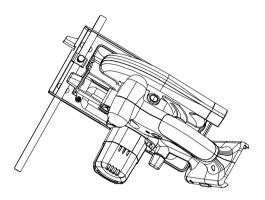
Item#3729



MODEL NO: PCSD180T

PLEASE READ THESE INSTRUCTIONS CAREFULLY
TO ENSURE THE SAFE AND EFFECTIVE USE OF THIS TOOL

FUNCTIONAL DESCRIPTION



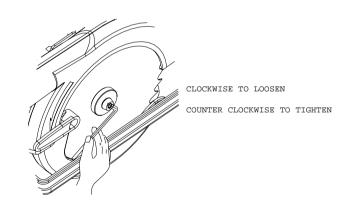


Figure-1

FUNCTIONAL DESCRIPTION

ADJUST THE CORRECTION SCREW THEN TIGHTEN THE LOCKNUT

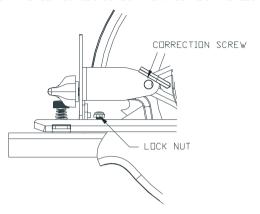


Figure 2

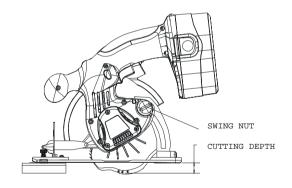


Figure-3

FUNCTIONAL DESCRIPTION

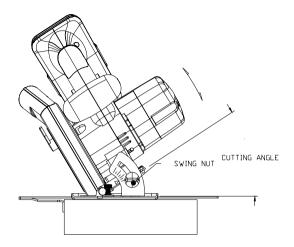


Figure-4

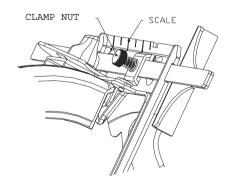
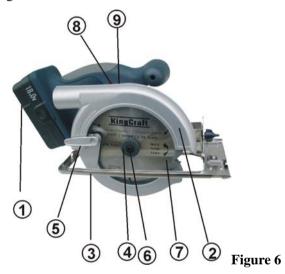


Figure-5

LIST OF MAIN PARTS

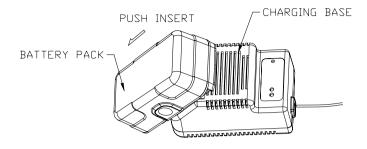
- 1) Battery pack
- 2) Upper guard
- 3) Base
- 4) Flange
- 5) Lower guard

- 6) Nut
- 7) Saw blade
- 8) Switch lock
- 9) ON/OFF switch



TECHNICAL SPECIFICATIONS:

Description	PCSD180T
Rating Voltage	18Volts
Nominal power	200W
No-load speed	2500min
Saw blade	Ø6. 49ר 0.39inch
Cutting depth at 90°	0-2.00inch
Cutting depth at 45°	0-1.50inch
Weight	7.49pound
No-load noise	85dB



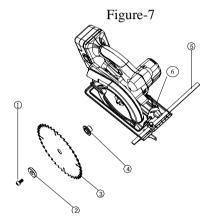


Figure-8

GENERAL SAFETY RULES

WARNING! Read and understand all instructions. Failure to follow all instructions listed below may result in electric shock, fire or serious personal injury.

SAVE ALL INSTRUCTIONS!

WORK AREA

- 1. Keep your work area clean and well organized. Cluttered benches and dark areas invite accidents.
- 2. Do not operate power tools in explosive atmosphere, such as in the presence of flammable liquids, gases, or dust. Power tools create sparks which may ignite the dust or fumes.

3. Keep bystanders, children and visitors away while operating a power tool. Distractions can cause you to lose control.

ELECTRICAL SAFETY

- Do not abuse the cord. Never use the cord to carry the tool. Keep cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately. Damaged cords may create a risk of fire.
- 2. A battery operated tool with integral batteries or a separate pack must be recharged only with the specified charger for the battery. A charger that may be suitable for one type of battery may create a risk of fire when used with another battery.
- 3. Use battery operated tool only with specifically designated battery pack. Use of any other batteries may create a risk of fire.

PERSONAL SAFETY

- Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use tool while tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
- 2. Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing and gloves away from moving parts. Wear protective goggles when operating the machine. It is recommended to wear protective goggles, gloves, sturdy non-slipping shoes and an apron.
- 3. Avoid accidental starting. Be sure switch is in OFF position before installing battery pack. Carrying tools with your finger on the switch or installing a battery pack when the switch is ON invites accidents. Do not install the battery pack before carrying out any work on the machine.
- 4. Remove adjusting wrench before turning the tool on. A wrench or a key that is left attached to a rotating part of the tool may result in personal injury.
- 5. Do not overreach. Keep proper footing and balance at all times. Proper footing and balance enables better 6 control of the tool in unexpected

- situations.
- Use safety equipment. Always wear eye protection. Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.

TOOL USE AND CARE

- 1. Use clamps or other practical way to secure and support the workpiece to a stable platform. Holding the work by hand or against your body is unstable and may lead to loss of control.
- 2. Do not force tool. Use the correct tool for your application. The correct tool will do the job better and safer at the rate for which it is designed.
- 3. Do not use tool if switch does not turn ON or OFF. Any tool that cannot be controlled with a switch is dangerous and must be repaired.
- 4. Disconnect battery pack from tool or place the switch in locked or OFF position before making any adjustments, changing accessories or storing the tool. Such preventive safety measures reduce the risk of starting the tool accidentally.
- 5. Store idle tools out of reach of children and other untrained persons. Tools are dangerous in the hands of untrained users. They should be kept away from work area.
- 6. When battery pack is not in use, keep it away from other metal objects like paper clips, coins, keys, nails, screws, or other small metal objects that can make a connection from one terminal to another. Shorting the battery terminals together may cause sparks, burns or a fire.
- 7. Maintain tools with care. Keep cutting tools sharp and clean. Properly maintained tools, with sharp cutting edges are less likely to bind and are easier to control.
- 8. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the tools operation. If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.

 Use only accessories that are recommended by the manufacturer for your model. Accessories that may be suitable for one tool may become hazardous when used on another tool.

SERVICE

- 1.Tool service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel could result in a risk of injury.
- 2. When servicing a tool, use only identical replacement parts. Follow instructions in the maintenance section of this manual. Use of unauthorized parts or failure to follow Maintenance Instructions may create a risk of electric shock or injury.

SPECIFIC SAFETY RULES

- 1. DANGER! Keep hands away from cutting area blade. Keep your second hand on auxiliary handle; so that hand cannot be accidentally cut by the blade.
- 2. Keep your body positioned to either side of the saw blade, but not in line with the saw blade. KICKBACK could cause the saw to jump backwards.
- 3. Do not reach underneath the work. The guard can not protect you from the blade below the work.
- 4. Check lower guard for proper closing before each use. Do not operate saw if lower guard does not move freely and closes instantly. Never clamp or tie the lower guard into the open position. If saw is accidentally dropped, lower guard may be bent. Raise the lower guard with the retracting hand and make sure it moves freely and does not touch the blade or any other part, in all angles and depths of cut.
- 5. Check the operation and condition of the lower guard spring. If the guard and the spring are not operating properly, they must be serviced before lower guard may operate.
- 6. Lower guard should be retracted manually. Always observe that the lower

- guard is covering the blade before placing the saw down on bench or floor. Be aware of the time it takes for the blade to stop after switch is released.
- NEVER hold piece being cut in your hand or across the legs. It is important
 to support the work properly to minimize body exposure, blade binding, or
 loss of control.
- 8. Always use blades with correct size and shape arbor holes. Blades that do not match the mounting hardware of the saw will run eccentrically, causing loss of control.
- 9. Never use damaged or incorrect blade washers or bolts. The blade washers and bolts were specially designed for your saw, for optimum performance and safety of operation.
- 10. When blade is binding, or when interrupting a cut for any reason, release the trigger and hold the saw motionless in the material until the blade comes to a complete stop. Never attempt to remove the saw from the work or pull the saw backwards while the blade is in motion or KICKBACK may occur. Take corrective actions to eliminate the cause of blade binding.
- 11. When restarting a saw in the workpiece, center the saw blade in the kerf and check that saw teeth are not engaged into the material. If saw blade is binding, it may walk up or KICKBACK from the workpiece as the saw is restarted.
- 12. Support must be placed under the panel on both sides, near the line of cut and near the edge of the panel
- 13. Do not use dull or damaged blade. Unsharpened or improperly set blades produce narrow kerf causing excessive friction.
- 14. Blade depth and bevel adjusting levers must be tight and secure before making cut.
- 15. Never place your hand or fingers behind the saw. If KICKBACK occurs, the saw could easily jump backwards over your hands, possibly causing severe injury.
- 16. Before cutting be sure depth and bevel adjustments are tight.
- 17. Avoid cutting nails, inspect for and remove all nails from lumber before

- cutting.
- 18. When operating the saw, keep the cord away from the cutting area and position it so that it will not be caught on the workpiece.
- 19. Never attempt to saw with the circular saw held upside down in a vise.
- 20. Before setting the tool down after completing a cut, be sure that the lower guard has closed and blade has come to a complete stop.

IMPORTANT SAFETY INSTRUCTIONS FOR BATTERY CHARGERS

This manual contains important safety and operating instructions.

- 1. Before using charger, read all instructions and cautionary markings on charger, battery pack, and product using battery pack.
- 2. DANGER: 120 volts present at charging terminals. Do not probe with conductive object. Danger of electric shock or electrocution.
- 3. DANGER: If battery pack case is cracked or damaged, do not insert into charger. Danger of electric shock or electrocution.
- 4. The charger and battery pack are specifically designed to work together. DO NOT attempt to charge the battery pack with any charger other than the ones in this manual.
- 5. Do not expose charger to water, rain or snow.
- 6. These chargers are not intended for any uses other than charging rechargeable batteries. Any other uses may result in risk of fire, electric shock or electrocution.
- 7. To reduce risk of damage to electric plug and cord, pull by plug rather than cord when disconnecting charger.
- 8. Make sure cord is located so that it will not be stepped on, tripped over, or otherwise subjected to damage or stress.
- 9. An extension cord should not be used unless absolutely necessary. Use of improper extension cord could result in risk of fire, electric shock or electrocution.
- 10. The charger is ventilated through slots in the top and the bottom of the housing. Do not place any object on top of charger or place the charger

- on a soft surface that might block the ventilation slots and result in excessive internal heat. Place the charger in a position away from any heat source.
- 11. Do not operate charger if it has received a sharp blow, been dropped, or otherwise damaged in any way. Take charger to an authorized service center.
- 12. Do not disassemble charger, take it to an authorized service center when service or repair is required. Incorrect reassemble may result in a risk of electric shock, electrocution or fire.
- To reduce risk of electric shock, unplug charger from outlet before attempting any cleaning. Removing the battery pack will not reduce this risk.
- 14. Never attempt to connect 2 chargers together.
- 15. DO NOT store or use the tool and battery pack in locations where the temperature may reach or exceed 105F° (such as outside sheds or metal buildings in summer).
- 16. The charger is designed to operate on standard household electrical power (120 volts). Do not attempt to use it on any other voltage.

IMPORTANT SAFETY INSTRUCTIONS FOR BATTERY PACKS

The battery packs are not fully charged when taken out of the carton! First read the safety instructions below. Then follow charging notes and procedures.

READ ALL INSTRUCTIONS

- 1. Do not incinerate the battery pack even if it is severely damaged or is completely worn out. The battery pack can explode in a fire.
- 2. A small leakage of liquid from the battery pack cells may occur under extreme usage or temperature conditions. This does not indicate a failure. However, if the outer seal is broken and this leakage gets on your skin:
 - a. Wash quickly with soap and water.

- b. Neutralize with a mild acid such as lemon juice or vinegar.
- c. If battery liquid gets in your eyes, flush them with clean water for a **minimum of 2 minutes** and seek immediate medical attention. (medical notes: the liquid is 25-35% solution of potassium hydroxide.)
- 3. Never attempt to open the battery pack for any reason. If the plastic housing of the battery pack breaks or cracks, immediately discontinue use and do not recharge.
- 4. Do not carry extra battery packs in pockets, or tool boxes along with other metal objects. Battery pack could be short circuited causing damage to the battery pack and possibly causing severe burns or fire.
- 5. Charge the battery packs only in chargers.
- 6. NOTE: review and observe all of the "IMPORTANT CHARGING NOTES" in the charger instruction section of this manual.
- 7. NOTE: the rechargeable batteries contain nickel-cadmium. Cadmium is considered to be a toxic material by the Environmental Protection Agency. Before disposing of damaged or worn out Nickel-Cadmium battery packs, check with your state Environmental Protection Agency to find out about special restrictions on the disposal of these battery packs or return them to a certified service center for recycling.

Changing the saw blade (See Fig.1)

Remove the battery pack before carrying out any work on the machine.

- 1. Hold the work spindle still by pressing the spindle lock down and loosen the screw. Remove washer and clamping disc.
- 2. Swing swivel guard backwards, hold it still, and remove the saw blade from the clamping flange.
- 3. Fit the new saw blade by following the above steps in the reverse order. The arrow on the saw-blade must point in the same direction as the direction of rotation arrow.

Adjusting the Guide-plate (See Fig. 2)

If a correction of the 90° angle of the guide plate to the saw blade is necessary,

use the correction screw.

Adjusting the Cutting depth (See Fig. 3&4)

For the cleanest possible cut, set the cutting depth whenever possible 5 mm deeper than the thickness of the material. Slacken the swing nut for adjusting depth of cut, set the cutting depth, and tighten the swing nut again.

Adjusting the cutting angle

Slacken the swing nut for adjusting angle of cut, set the cutting angle on the scale, and tighten the swing nut again. Check angle of cut by making a test cut.

Adjusting the rip fence (See Fig.5)

Slacken the clamp nut and set the rip fence to the required cutting width by means of the cutting line scale. Retighten clamp nut.

Sawdust ejection

The sawdust and wood-chips produced by the saw can be sucked up by a vacuum cleaner or caught directly in the sawdust bag. They are not included in standard equipment.

Switching the Machine ON and Off

For safety reasons this power tool is equipped with a switch lock that prevents the ON/OFF switch from being locked in the ON position. (see figure 6)

Switching on: Press switch lock and then ON-OFF switch.

Switching off: Release ON-OFF switch.

Advice for operation

- 1. Switch on the machine and apply to the material with the front edge of the guide plate.
- 2. Align the tool with the parallel guide or a line drawn by hand prior to operation.

3. Hold the tool firmly by both handles and work applying light pressure.

INSTALLING AND REMOVING THE BATTERY PACK

NOTE: Make sure your battery pack is fully charged.

To install the battery pack into the tool handle, align the base of the tool with the notch inside the tool's handle and slide the battery pack firmly into the handle until you hear the lock snap. To remove the battery pack from the tool, press the release buttons and firmly pull the battery pack out of the tool handle. Insert battery into the charger as described in the charger section below.

THE BATTERY PACK

Your tool uses an 18 volt battery pack. When ordering replacement battery packs be sure to include catalog number and voltage.

CHARGERS

Your battery pack can be charged by a 1 hour charger. Be sure to read all safety instructions before using your charger. Servicing at an authorized service center is required to avoid damage to static sensitive internal components.

Read all of the instructions in the battery charger section to this manual before attempting to charge the battery pack for your tool. Always use correct battery pack. Never install any other battery pack, it will ruin your tool and may create hazardous condition.

Charging procedure

1. The charger does not require adjustment and is designed to be as easy as possible to operate. Please observe the procedure as follows:

14

1) Plug the charger into an appropriate AC power outlet.

- 2) Insert the battery pack into the charger, as shown in Fig 7, making sure the pack is fully seated in the charger. The red light indicator will illuminate showing that the battery is being charged.
- 3) When charging is well done green light will illuminate. The minimum charge time is normally 1hour after which the battery should be removed.

IMPORTANT CHARGING NOTES

Longest life and best performance can be obtained if the battery pack is charged when the air temperature is between $65^{\circ}F$ - $75^{\circ}F$.

Do not expose charger to water, rain or snow.

- 1) The charger and battery pack may become warm to touch while charging. This is a normal condition and does not indicate a problem.
- 2) The charger has an internal temperature limit that, when exceeded, will temporarily stop the full charge current. This is indicated by the green light being ON. The normal charge cycle will resume when the temperature falls below the present limit and will be indicated by the red light turning ON. To prevent overheating, do not cover the charger and do not charge battery packs in direct sunlight or near heat sources.
- 3) During normal use the internal temperature of the battery pack may rise. If the battery pack is being used and then immediately put into the charger for recharging, the temperature might be too high and the green light will turn ON indicating that the cut off temperature has been exceeded. In this situation let the battery cool down. The charging cycle will come back on automatically after the temperature cooled down. This will be indicated by the red light turned ON.
- 4) If the battery pack does not charge properly 1) Check current at

receptacle by plugging in a lamp or other appliance. 2) Check to see if receptacle is connected to a light switch which turns power off when

- you turn out the light. 3) Move charger and battery pack to a location where the surrounding air temperature is approximately 65°F 75°F (18-24°C). If charging problems persist, take or send the tool, battery pack and charger to your local service center.
- 5) The battery pack should be recharged when it fails to produce sufficient power on jobs which were done previously. DO NOT CONTINUE to use under these conditions. Follow the charging procedure. You may also charge a partially used pack whenever you desire with no adverse affect on the battery pack.
- 6) Under certain conditions, with the charger plugged in to the power supply, the exposed charging contacts inside the charger can be shorted by foreign material. Foreign materials of a conductive nature such as, but not limited to, steel wool, aluminum foil, or any buildup of metallic particles should be kept away from charger cavities. Always unplug the charger from the power supply when there is no battery pack in the cavity. Unplug charger before attempting to clean.
- 7) Do not immerse charger in water or any other liquid.
- 8) WARNING: do not allow any liquid to get inside charger. Electric shock may result. To facilitate the cooling of the battery pack after use, avoid placing the charger or battery pack in a warm environment such as in a metal shed or an un-insulated trailer.
- 9) CAUTION: never attempt to open the battery pack for any reason. If the plastic housing of the battery pack breaks or cracks, return to a service center for recycling.

ASSEMBLY

REMOVING OR INSTALLING THE BLADE

CAUTION:

Always be sure that the tool is switched off and the battery cartridge is remove

before installing or removing blade.

- 1. To remove the blade (Fig.8, press the shaft lock so that the blade cannot revolve and use the hex wrench to loosen the bolt clock-wise. Then remove the bolt, outer flange and blade.
- 2. To install the blade, follow the removal procedure in reverse.

BE SURE TO TIGHTEN THE BOLT SECURELY

- 3. Hold the work spindle still by pressing the spindle lock down and loosen the screw. Remove washer and clamping.
- 4. Swing swivel guard backwards, hold it still, and remove the saw blade from the clamping flange. Fit the new saw blade by following the above steps in the reverse order. The arrow on the saw-blade must point in the same direction as the direction of rotation arrow.

CAUTION:

BE SURE THE BLADE IS INSTALLED WITH TEETH POINTING UP AT THE FRONT OF THE TOOL.(SEE FIGURE 8)

- 1) Nut
- 2) Outer flange
- 3) Blade
- 4) Inner flange
- 5) Gauge
- 6) Hex Wrench Storage

When not in use, the hex wrench can be conveniently stored.

CAUTION: Always be sure that he tool is switched off and battery cartridge is removed before any adjustment is attempted.

ADJUSTING DEPTH OF CUT

Loosen the lever on the depth guide and prove the base down.

At the desired depth of cut, secure the base by tightening the lever.

CAUTION:

Use a shallow depth of cut, when cutting thin work pieces for cleaner, safer cuts. After adjusting the depth of cut, always tighten the lever securely.

OPERATION

- 1. Switch on the tool and apply to the material with the front edge of guide plate.
- 2. Align the tool with the parallel guide or a line drawn by hand prior to operation.
- 3. Hold the tool firmly by both handles.

BEVEL CUTTING

Loosen the screw on the bevel scale plate on the front of the base. Set for desired angle $(0-45^{\circ})$ by tilting accordingly, then tighten the swing nut securely.

CAUTION:

Cutting work pieces that exceed the maximum cutting depth will result in overload of the battery. Overheating and smoke emitting from the battery will occur.

Hints

- When sawing along a line use the cutting information shown in the window according to the cutting angle.
- Right-angled cut –indicator on 0-45°.
- For bevel cuts the guide (i. e. parallel guide, ridge) must be applied shifted to scale (carry out a test cut). The parallel guide allows a maximum cutting length of 5.91 inches/150 mm and maximum cutting depth 1.97 inches/50 mm.
- For wider cuts use a guide bar (accessory) or lead the tool along a fixed

ridge.

To avoid a tearing out of the cutting edges when working sensitive area (if the surface is very smooth crepe tape also enables easy drawing of line), fixing a thin board of wood to the workpiece and sawing through both will also avoid tearing out effectively.

ADJUSTING FOR ACCURACY OF 90° CUT (VERTICAL)

This adjustment has been made by the manufacturer. But if it is off, adjust the adjusting screw with a screwdriver while squaring the blade with the base triangular rule, try-square, etc.

CAUTION:

After adjusting the depth of cut and bevel angle, be sure to tighten the screw.

Sighting

- The front of the base is notched to provide accurate guidance.
- For straight cuts, align the edge 0° engraved on it with your cutting line on the workpiece.
- For 45° bevel cuts, align the edge with 45° engraved on it with your cutting line.

ON/OFF Switch Action

CAUTION:

- Before inserting the battery into the tool, always check to see that the switch trigger actuates properly and return to the "OFF" position when released.
- To prevent the switch trigger from being accidentally pulled, a lock-off button is provided.
- To start the tool, press the left of the lock-off button and pull the switch trigger, release the switch trigger to stop.

OPERATION

- Hold the tool firmly. Set the base plate on the work piece to be cut without the blade making any contact. Then turn the tool ON and wait until the blade attains full speed.
- Now simply move the tool forward over the work piece surface, keeping it flat and advancing smoothly until the sawing is complete. To get clean cuts, keep your sawing line straight and your speed of advance uniform.

CAUTION:

- Always gently keep the tool moving straight ahead when cutting.
 Forcing or twist the tool will result in overheating of motor and dangerous kickback, possibly causing severe injury.
- If the tool is operated continuously until the battery cartridge has discharged, allow the tool to rest for 30 minutes before proceeding with a fresh battery.

GUIDE RULE

The handy guide rule allows you to do extra-accurate straight cuts. Simply slide the guide rule up snugly against the side of the work piece and secure it in position with the clamp screw on the front of the base. It also makes repeated uniform cuts possible.

MAINTANCE

CAUTION:

Always be sure that the tool is switched OFF and the battery cartridge is removed before attempting to perform inspection or maintenance.

REPLACING CARBON BRUSHES

Remove and check the carbon brushes regularly. Replace when they wear down to the limit mark. Keep the cathon brushes clean and free to slip in the holder.

19

Both brushes should be replaced at the same time. Use only identical carbon brushes. Use a screwdriver to remove the brush holder caps. Take out the worn carbon brushes, insert the new ones and secure the brush holder caps.

TIPS FOR MAINTAINING MAXIMUM BATTERY LIFE

- Charge the battery pack before battery is completely discharged.
 Always stop tool operation and charge the battery pack when you notice less tool power.
- 2. Never recharge a fully charged battery pack. Overcharging shortens the battery service life.
- 3. Charge the battery pack at room temperature 40°F 105°F. Let a hot battery pack cool down before re-charging it.

Thank you for purchasing a top quality **KingCraft** product. This Cordless Circular Saw item #3729 was tested and meets our stringent quality standards. This product is warranted to be free from manufacturing defects in original materials, including original parts, and workmanship until Oct 18th. 2005 or 1 year with proof of purchase.

The warranty is void if the defect is due to accidental damage, misuse, abuse, neglect, improper repair or alteration by unauthorized persons or failure to follow operation instructions provided with the product. This warranty does not apply to commercial use.

The warranty is non-transferable and applies only to the original purchase and does not extend to subsequent owners of the product. Liability under this warranty is limited to repair, replacement or refund. In no event shall liability exceed the purchase price paid by the purchaser of the product. Under no circumstances shall there be liability for any loss, direct, indirect, incidental, special or consequential damage arising out of in connection with use of this product. This warranty is valid only in the United States of America. This Warranty gives you specific legal rights. However you may have other rights that vary from state to state. Some states do not allow limitation on implied warranties or exclusion of consequential damages therefore these restrictions may not apply to you.

In case you find the product to be defective please send it within the warranty period to our service center, To avoid transport damages please send the product in the original packaging. In return you will receive either your repaired item, a new product or a refund. Please fill out the Warranty Card and send it together with the product and purchase receipt

To arrange pick-up of the defective item please call our service center:

Schenker International Inc.

Tel: 1-888-367-7373 (Business hours Mon-Fri 9:00am-4:00 pm CT)

Website: http://www.wk-usa.com

Wachsmuth& Krogmann,Inc.

123 Sivert Court, Bensenville,IL 60106,

USA

LIMITED WARRANTY

22